

GREATER FARALLONES and MONTEREY BAY NATIONAL MARINE SANCTUARIES (GFNMS and MBNMS) JOINT SANCTUARY ADVISORY COUNCIL MEETING Wednesday August 16th, 2017 8:45AM – 4:30PM Half Moon Bay Yacht Club 214 Princeton Ave, Half Moon Bay, CA 94019 Key Meeting Outcomes



Note: The following notes are an account of discussions at the Sanctuary Advisory Council meeting and do not necessarily reflect the opinion or position of the Greater Farallones National Marine Sanctuary, Monterey Bay National Marine Sanctuary, or the National Oceanic and Atmospheric Administration.

**Greater Farallones Sanctuary Advisory Council Members Present:** Kellyx Nelson, Christy Walker, Dominique Richard, Cea Higgins, Richard Charter, Bruce Bowser, Francesca Koe, Elizabeth Babcock, Bibit Traut, Barbara Emley, John Berge, John Largier, Jaime Jahncke, Chris Potter (for Jennifer Phillips), Steve Mietz (for Cicely Muldoon), Sarah Allen, LT Kip Hutchinson, Paul Michel, Dawn Hayes

**Monterey Bay Sanctuary Advisory Council Members Present:** Ed Smith, Dan Haifley, Gary Hoffmann, PJ Webb, Mike Bekker, Paul Reilly, Maria de la Paz Carpio-Obeso, Brian Nelson, Tucker Hirsch, Steve Scheiblauer, Gary Pezzi, Rich Hughett, Clifton Herrmann, Maria Brown, Paul Michel, LT Kip Hutchinson, Cynthia Mathews, Keith Rootsaert, Bart Selby, Mindy Maschmeyer

#### Copies to:

Bill Douros, ONMS West Coast Regional Office

#### **Review Agenda**

Roll Call – 13 voting members for MBNMS, 14 voting members for GFNMS. Quorum established. Review Agenda

#### **GFNMS Sanctuary Advisory Council (SAC) Business**

Approve May Meeting Minutes Motion: Richard Charter Second: Bruce Bowser 5 approve; 0 oppose; 3 abstain.

# **Minutes approved**

#### Announcements

The November SAC Meeting has been rescheduled from its previous date of November 29<sup>th</sup> to the new date of Wednesday November 15<sup>th</sup> at the San Francisco Zoo.

## Member Recruitment

Current seat vacancies are Conservation Alternate, Mendocino/Sonoma Alternate, Youth Alternate. There is a new recruitment process where applicants are not limited to the 30-day recruitment period as in the past. Vacancies can now be posted for up to 60 days, however, if there are not enough qualified applicants, we can re-post the vacancy and continue to accept applications on a rolling basis. An application review subcommittee was formed with Elizabeth Babcock, Bibit Traut, Francesca Koe, and Dominique Richard.

## **Discuss Fall SAC Retreat**

Date is Wednesday October 4<sup>th</sup>. Ideal location to be held at Point Reyes Chimney Rock Lifeboat Station. The theme of the retreat will be benthic habitat. Includes SAC Accomplishments and drafting FY18 SAC Workplan, setting 2018 meeting dates; presentation on Benthic Habitat Goals by Karen Reyna and resource protection; presentation on last fall's Nautilus cruise by Jan Roletto and conservation science; building and driving ROVs with the Sanctuary Education team and learning about their deep sea coral curriculum; dinner in Point Reyes.

# **ACCESS Cruise**

SAC members are invited to join the ACCESS cruise September 26<sup>th</sup> or 27<sup>th</sup> out of Bodega Bay. It is an all day event with sanctuary staff and partner researchers on the water. Please get in touch with Jenn if you are interested as there are a limited number of spots.

## Sediment Management Working Group Update - Cea Higgins

Cea Higgins gave an update on the Sediment Management Working Group. The goal of the working group is to develop sediment management recommendations for specific, prioritized locations experiencing sediment issues along the Sonoma and Marin County coastline, and determine governance structure for select projects. These recommendations will be presented to the Sanctuary Advisory Council at the November 2017 Sanctuary Advisory Council meeting for discussion and action before being forwarded to the Sanctuary for consideration and inclusion in a final Regional Sediment Management Plan.

Cea shared the working group timeline, the working group membership comprised of stakeholders and landowner agencies, and the Technical Advisory Committee (TAC) membership that consists of government agencies. The role of the TAC is to provide regulatory and governance review of recommendations formulated by the Working Group. The TAC evaluated their regulatory guidelines around the strategies of managed retreat, beach nourishment, living shorelines/reefs, education/research, restoration of wetlands, restoration of dunes, armoring on land, armoring in sea, and dredging.

She shared accomplishments from the working group and staff work in progress and next steps, which include the meeting on August 29<sup>th</sup> in Bodega Bay and the final presentation to the Advisory Council for review, input, and action at the November 15<sup>th</sup> SAC meeting.

There was a question on if the state reviews and approves the plan. Doug George answered that the statewide Coastal Sediment Management Workgroup will accept the plan and will be able to

review final stages to contribute to the big picture. PJ Webb asked about defining clean sediment and if it is a separate parallel track from Environmental Protection Agency (EPA). Cea clarified that the Working Group has planning departments that have brought that topic up, and the best we can do is come with a recommendation around parameters to not interfere with what has already been established.

#### Member Reports

Dominique Richard: Participated in paleontological survey on Drakes Beach to track the erosion around the fossils visible in the cliffs. Of note are the fossils of a sea cows located on the western sand spit at the mouth of Drakes Estero. In this context Beach Watch profile pictures have been useful to determine the best season to conduct this type of survey since these photos show month-to-month level of sand accumulation. He is also developing his skills in Geographic Information Systems (GIS) and in this context, signed up with a citizen science organization organized under the auspices of the Association for Advancement of Science (AAAS), and with a group focused on environmental science set up by the Environmental Systems Research Institute (ESRI) which commercialize ArcGIS, a leading GIS Software. He would like to initiate contact with anyone associated with the sanctuary system who belong to these organizations.

Barbara Emley: Salmon season started on August 1<sup>st</sup>; the first deliveries seemed good but now we have bad weather. *She then yielded the floor to John Mellor* because Barbara is not fishing anymore. John reported that there are normal weather patterns again. It has turned back into a cold-water regime, which is good for krill and the food chain. Four years of abnormal conditions have wreaked havoc. People are going up to Bolinas fishery and Sacramento River. He is getting ready to fish for nearshore rockfish. He is on the state whale entanglement working group which is making good progress. They are developing a small team that looks at fishing conditions and develops a framework for fishermen to respond. There have only been three confirmed California Dungeness crab entanglements this year, which is about normal.

Jaime Jahncke: Completed three ACCESS cruises. First one was May in Monterey Bay National Marine Sanctuary from Point Año Nuevo to south Monterey/Pacific Grove to count whales and crab pots. They follow the same ACCESS protocol as in the Greater Farallones area. Later in May was the regular ACCESS cruise in Greater Farallones and Cordell Bank. They went out again in July; it was windy, rough and productive, though not as many seabirds as we normally see. They use ACCESS data to develop methods to assess forage fish such as anchovy and juvenile rockfish. Santa Cruz Lab collaborated with them on those analyses; that paper is under revision. It discusses assessing rockfish data that gives similar results as NOAA produces even using completely independent methodology. There will be another paper within the next week about ship strikes; it discusses using a naval encounter model, which looks at the likelihood of two ships to encounter each other in the ocean; use those to predict location of ships to estimate mortality rates for humpback, blue, and fin whales on the West Coast. According to the models, the number of blue whales are eight times more likely to be struck than the numbers NOAA estimates. Potential Biological Removal is 2 for blue whales but about 18 are being hit per year. We are using similar methodology to work with Cordell Bank and Greater Farallones to assess how the speed reductions helps decrease mortality from ship strikes. They are using ACCESS data to assess overlap between fisheries and wildlife and will be sharing information to the

working group to work with the fishermen to come up with the best recommendations to decrease potential impacts.

Richard Charter: Congressman Jared Huffman will be convening Wednesday August 23<sup>rd</sup> at 10:30am for a district hearing and public forum on protecting national marine sanctuaries at Sausalito Bay model. Panel will be Congressman Jared Huffman, Congresswoman Nancy Pelosi, Congresswoman Jackie Spear, Former Congresswoman Lynn Woolsey, a number of businesspeople, and scientists. There is an opportunity for public testimony. The event is sold out but may be livestreamed.

Kellyx Nelson: Good news in salmonid restoration in San Mateo County. Received \$4 million in the state budget, one and a half million from NOAA Coastal Resiliency Grant, and anticipating another \$1 million from San Mateo County to reestablish Butano channel through Pescadero marsh; would dredge 8,000 feet to enable fish to access the Butano watershed that has been cut off from migration for decades. It will also have the benefit of addressing chronic flooding in Pescadero; restoring fish passage, improving hydrology, which may help with annual fish kills of Steelhead. Another project is a partnership with California State Parks, the Resource Conservation District, NOAA, and other agencies, working with California Conservation Corps to install a sandbag dam across a pit in Pescadero marsh that is a source of the anoxic water that rushes in and contributes to or causes annual mortality events for Steelhead. Permits came through for this project. Hope to avoid or minimize impacts of fish kill in Pescadero marsh. Began construction on habitat restoration project in San Gregorio creek. Pescadero and San Gregorio watersheds are NOAA's priorities for salmonid restoration. Second phase of installing large woody debris; fish are responding to this. Have been monitoring the 100-acre floodplain restoration project; held up to big storms and is storing a lot of sediment that is not filling up the lagoon. Regarding water quality in San Mateo County, through partnerships with San Mateo Harbor District and Surfrider, have been trying to determine sources of bacteria that are chronic inputs. Getting close to having interesting news. Great support from Harbor District. First Flush is coming up. Water quality program is through MBNMS. We partner with their water quality folks on first flush program to mobilize volunteers for monitoring.

John Largier: Ongoing projects in estuaries. Getting some research in the Esteros. Tomales has ongoing research and activity with ocean acidification, seagrass, blue carbon, aquaculture. New revival of Tomales Bay watershed council; linking watersheds, salmon, and runoff. Sediment work is happening; working group, high frequency radar. Doug George is using research to understand sediment movement, and plankton regionally. For ocean conditions, it has been a strong upwelling year; phytoplankton blooms have been huge; low salinity last winter. In February was almost freshwater at Golden Gate impacting salinity all the way to Drakes Bay and Bodega Bay. Trying to understand the nature of the event and ecological impact, mostly in-bay issues. It is also a question of how to report on the disruption of some of the restoration projects, as it is part of natural variability, but must wait for recovery.

Kip Hutchinson: Did a fisheries operation in Channel Islands National Marine Sanctuary. Patrolled the sanctuary and marine protected areas and got good recordings. Salmon operations are coming up in San Francisco and Humboldt area.

Elizabeth Babcock: K-12 content is shifting at state and federal level. Proposed cuts are also affecting Department of Education. In California, new superintendent election for public instruction; they will need to lobby to help at the state level about the situation in California. One in 12 kids in the United States gets educated here; CA is 46<sup>th</sup> out of 50 states in per person expenditure on public instruction. Important to have dollars to support environmental education for kids. State legislature just passed \$4 million allocation to improve environmental education for California Regional Environmental Education Community (CREEC). Appointed regional members; there is one that serves the sanctuary area. Their goal is to build better partnerships between nonprofits that do environmental education. Elizabeth would like to follow up with Maria and Carol on this. This state has adopted new science teaching standards: the Next Generation Science Standards. About 70% of these standards have some environmental or human impact connection. We must help ensure that the curriculum is good. Goal to provide strong materials to get adopted into state curriculum. There was a live-stream of Nautilus into California Academy of Sciences for Get Into Your Sanctuary and it was a success. Suggestion to do this with an ACCESS cruise. Showing live science that has direct conservation impact within the sanctuary raises awareness. We had 2,100 teens ages 13-18 attend the Cal Academy Teen Science Night. The event was all organized by youth for youth. Elizabeth will be sending the youth alternate vacancy to them. Will send out the date for election for new superintendent.

Steve Mietz acting for Cicely Muldoon: Restoration of Drake's Estero complete, now in monitoring stages. On July 14<sup>th</sup>, the settlement of Comprehensive Ranch Management Plan came out. The clock started on 40 years to implement a general management plan amendment focused on pastoral lands of Point Reyes National Seashore. Notice of Intent hope to come out fall, along with public scoping meetings in area.

Sarah Allen: A report came out last month on marine debris and microplastics. This report analyzed and found high amounts of microplastics in sand samples except for in American Samoa. Parks are initiating of inventory of natural resources; there is a follow up to collaborate with other agencies to fill in gaps. Parks are identifying needs to fill. UC Berkeley Paleo Museum has collection of fossils and found new species of whale. More will be coming in sorting through specimens. Golden Gate has developed "resource stewardship strategy" for managing resources, and there is a big section on climate change in the sanctuary and how to respond.

Bruce Bowser: Days after last SAC meeting, a dead Blue whale washed onto Duxbury Reef/Agate Beach. It was a stunning sight; within hours, researchers were down there taking samples and doing necropsy. It drew a large number of visitors, made the local news, and traffic jams once word got out. Bruce went down there as a naturalist to try and field questions as best he could. Mary Jane Schramm gave him information on the whale to share with the public, and people were fascinated. In Bolinas, we are seeing lots of sand scouring this summer and conditions on beaches seem to be similar to winter. Usually have more accretion of sand.

Bibit Traut: Has been working with LiMPETS for college level curriculum. Interested in developing curriculum on sediment. Following up to Bruce, Bolinas looked like a winter beach with no sand.

Cea Higgins: September 16<sup>th</sup> is California Coastal Cleanup Day. Will be coordinating Sonoma Coast sites through Surfrider and Coast Walk. Good to have knowledge on marine debris as we survey and record debris.

Francesca Koe: Has photos of Blue whale at Agate Beach.

John Berge: Working with Toyon Research, they develop long range infrared cameras to monitor Gray whale migrations. Interested in developing shore-based cameras on shore or ship-based platforms to gather data. Could possibly be an avoidance tool. Have done an adaption of shorebased camera on whale watching boat "Condor" out of Santa Barbara. Want to do it on a ship; shipping company volunteered to have on board. Though they were chasing Benioff grant funding but funding fell through, though hoping to pursue further funding.

Christy Walker: Nothing to report.

# BREAK

# <u>GFNMS Superintendent's Report: Maria Brown, GFNMS Superintendent</u> <u>Permits</u>

A research permit was issued to Ben Rubinoff of UC Davis to examine how invasive fouling community composition changes spatially along an estuarine gradient and temporally across seasons under the influence of climate change. The permit was issued to allow the deployment of settlement plates at three sites along the western shore of Tomales Bay, CA in order to quantify community shifts.

A research permit was issued to Kate DuBois of Bodega Marine Laboratory to conduct research to compare the thermal tolerance of six eelgrass populations distributed along the length of Tomales Bay. Experiments in the field will be followed by lab-based experiments at the Bodega Marine Laboratory. The goal of the research is to learn how eelgrass meadows within Tomales Bay could be locally adapted or acclimated to gradients in temperature regimes under the influence of climate change.

An education permit was issued to Ms. Jane Reifert and Mr. Greg Barron (IA Worldwide Inc. (aka Incredible Adventures)) to attract white sharks at the Farallon Islands for the purposes of conducting educational tours. IA Worldwide Inc. appealed the permit issued to them in 2016 and once again requested permission to use chum and scent attractants during their tours. The Assistant Administrator of NOAA's National Ocean Service denied the appeal and upheld GFNMS' decision to allow only the use of decoys. This amendment was issued per the instructions of the Assistant Administrator's final disposition. The amendment incorporates a change to the company's name (now IA Worldwide, Inc.), a revised project title (now "Adventures in White Shark Education: Dispelling the Myths"), and extends the expiration date to 11/30/18.

A research permit was issued to Stephen Keith and Tracee Geernaert of International Pacific Halibut Commission (IPHC) to deploy bottom long lines in order to collect data on Pacific halibut. The IPHC setline survey is coordinated to support NOAA Fisheries stock assessments

each year and feed into the Pacific halibut stock assessment. Data from the survey are used to monitor changes in abundance, growth, and mortality in the adult population. Survey data are used to determine Pacific halibut range, local depletion, and fleet distribution effects on the resource.

A research permit was issued to Courtney Opshaug of Blue Ocean Gear LLC to deploy and test a smart trap that helps crab fishermen determine the most fuel-efficient way to retrieve and set traps, improving their catch per unit of fuel while reducing the potential for bycatch. Real-time data of how much catch is in the trap is transmitted to the fisherman onshore which allows them to determine the optimal route for trap retrieval, where the target species are abundant, and whether the smaller bycatch species are escaping as designed. This permit is being issued to allow the trap to be deployed during the months that fall outside the legal crab fishing season. This project was orginally permitted under MBNMS-2017-026, issued on January 26, 2017. This MULTI permit is being issued to allow the permittee to deploy the smart trap at two additional sites: one near Half Moon Bay in MBNMS and one near Bodega Bay in GFNMS.

A research permit was issued to Andrew Chang of Smithsonian Environmental Research Center (SERC) to deploy PVC panels on the sea bed to collect invasive species at three sites in Tomales Bay. Two buoys will be deployed at each site to mark the locations of the plates; each buoy will be anchored by a 50-lb concrete anchor. SERC will be working with California Department of Fish and Wildlife (CDFW) and the Moss Landing Marine Laboratories (MLML) as part of this state-mandated survey of California waters for non-native species. The project will survey benthic communities to assess the prevalence of fouling organisms; all taxa will be identified by expert taxonomists and sequenced and added to MLML's invertebrate sequence library.

A permit is under review for Dr. Richard Starr of Moss Landing Marine Labs to deploy a video lander on the sea floor, which is an underwater camera system designed to assess the relative abundance of fishes and invertebrates in marine areas without conducting extractive sampling. Data collected from each survey would include geographic coordinates, starting and ending times, fish counts, and species observed. This project would be conducted in collaboration with the Nature Conservancy and NOAA National Marine Fisheries Service.

A permit is under review for Graham Groneman of the Marin County Fire Department to use motorized personal watercraft (MPWC) for life-safety and search and rescue training within the sanctuary. The exact areas and seasonal windows in which trainings would be conducted are still being determined.

A permit is under review for James Moskito and Lawrence Groth of Great White Adventures to attract white sharks for educational tours.

A permit is under review for Barbara Block of Stanford University and Sal Jorgensen of Monterey Bay Aquarium to deploy moorings and receivers on the sea floor to track acoustically tagged White sharks and to attract White sharks for tagging, biopsy sampling and photo identification purposes. This work is a continuation of the Tagging of Pelagic Predators (TOPP) program's long-term research program to evaluate and monitor population trends, population biology, migrations, and behaviors of the Northeastern Pacific population of White sharks in both coastal and offshore waters.

A permit is under review for Bob Brodsky to conduct low overflights using an unmanned aerial system (UAS) to complete a bathymetric survey of eelgrass beds; the survey would measure existing and future density, health, and growth patterns of eelgrass. Surveys would be conducted in collaboration with CDFW and Bodega Marine Lab. The goal of the project is to accurately map eelgrass habitat in order to establish appropriate buffer distances for aquaculture activities in the northeast corner of Tomales Bay.

A question was asked about what decoys for shark attraction entail. They are permitted to use a decoy made of soft material in the shape of prey; cannot use Styrofoam and must retrieve after use; not allowed to troll but can cast from back of boat.

P.J. Webb asked about Courtney Opshaug's project with the smart crab traps and if it was related to the trap GPS project. Max Delaney clarified that the sanctuary issued a permit earlier this year to deploy this experimental device, and this is to continue the project. It is capable of transmitting real time data from the traps to shore. John Mellor is working with Courtney. They are using satellites because of spotty coverage in ocean.

John introduced additional NOAA staff and guests: Brian Christy, Lieutenant, Supervisory Enforcement Officer for State of California (NOAA Office of Law Enforcement); Dayna Matthews, Office of Law Enforcement West Coast Region; Marty McCoy from NOAA Office of General Counsel in Silver Spring, MD (Oceans and Coasts); Stephanie Altman, Chief of Oceans and Coasts section of NOAA Office of General Counsel.

# U.S. Coast Guard (USCG) Proposed Rule Update

As part of the final rule for the expansion of GFNMS and CBNMS, which took effect on June 9, 2015, NOAA postponed the effectiveness of the discharge requirements in both sanctuaries' regulations within the expansion areas for 6 months. The reason for the postponement was based on comments from the USCG that ONMS discharge regulations being implemented as result of the expansion, had the potential to impair the operations of USCG vessels and aircraft conducting law enforcement, search and rescue training and other statutorily mandated activities in the sanctuary. The intent of the postponement was to allow time for a separate regulatory process to be undertaken to consider allowing certain USCG discharge activities in GFNMS and CBNMS.

Since then, NOAA has published four notices to extend the postponement of the discharge requirements (for an additional 6-months each time) to provide adequate time for completion of an environmental assessment, and subsequent rulemaking, as appropriate. This current time extension would end on December 9, 2017 unless NOAA takes further action.

GFNMS and CBNMS staff have been working with the West Coast Regional Office, National Headquarters, and the USCG on a process to consider how to address Coast Guard's concerns.

NOAA completed a public scoping process to receive comments in May 2016 and is tentatively planning to release a draft environmental assessment and hold public hearings during fall 2017.

Public comment is expected to be open around the time of the fall Advisory Council meetings. This item will be on the November GFNMS SAC meeting agenda to discuss the draft environmental assessment.

## **Conservation Science Update**

Conservation Science staff met with a representative of the Kashia Band of Pomo Indians of the Stewarts Point Rancheria, California. They reached out to us to learn more about our Beach Watch program and our human activities monitoring data, which Beach Watch provides to the State's MPA Watch program. The tribe is interested in initiating monitoring programs on their ancestral lands along the Sonoma County coast. Beach Watch, which started wildlife and human use surveys in the area in 2014, is of particular interest to the tribe. Conservation Science staff provided an overview of Beach Watch, volunteer recruitment and training, and how protocols have evolved over the past two decades to provide coastal managers with targeted data, pertaining to their site specific management issues.

The first training of the new Beach Watch class will be held in Sonoma next week. We recruit new volunteers and hold trainings about every 3 to 4 years. We are concentrating more on the northern coast in adding new beaches. Contact Kirsten Lindquist for more information: klindquist@farallones.org.

Conservation Science staff met with staff from Point Blue Conservation Science to revise our long term monitoring of rocky intertidal habitat at Southeast Farallon Island. We are also working with staff from PISCO and MARINe programs to re-establish monitoring on the island this coming winter. Data sharing agreements and graduate student efforts were also discussed.

Conservation Science and Headquarters' staff provided input on the document "Guidelines for Assessing Exposure and Impacts of Oil Spills on Marine Mammals." This document will serve to provide guidance on the assessment and restoration of marine mammals injured by oil spills. This document was initially drafted during a workshop hosted by NOAA's Office of Response and Restoration and the Office of Protected Resources held in Seattle during August 2015. The document focuses on strategies to improve intra-agency coordination and understanding of the various species marine mammals affected by oil pollution, and net benefits of response and damage assessment actions.

# **Education Programs Update**

151 youth participated in our 40-hour Marine Explorers Youth Program this summer. For Get Into Your Sanctuary (GIYS) Day on Saturday August 12<sup>th</sup>, partners hosted a whale watch trip to the Farallones and two family Crab Fishing workshops, partners led GIYS trips in Jenner, and Point Reyes and Fitzgerald Marine Reserve hosted a special Get Into Your Sanctuary Day event.

The White Shark Naturalist Class is full with 50 participants, the class will be held on August 19<sup>th</sup> at the GFNMS offices. Mark your calendars for Sharktoberfest, Saturday, September 30th, 11am to 4pm at the GFNMS campus.

Cea Higgins noted that the an additional partner, Greater Farallones Association, Get Into Your Sanctuary Day whale watch cruise scheduled for August 12<sup>th</sup> was cancelled and is rescheduled for October 21<sup>st</sup>.

## **Update on Activities in MBNMS Northern Management Area**

## **Vessel Groundings**

On the morning of July 13th, a 25-foot panga grounded on Pescadero State Beach. USCG responded first and contacted Homeland Security Immigration and Customs Enforcement (ICE) as well as GFNMS staff. The vessel was found intact with 200 gallons of fuel and two 200-HP engines on-board; no pollution spill or sheen was observed. GFNMS staff worked with USCG and ICE to ensure that the vessel would be removed immediately. USCG was prepared to mobilize a salver to remediate the spill hazard, however, ICE ended up seizing the vessel for evidence since they deemed this incident a criminal investigation. ICE contracted Vessel Assist to remove the vessel and they were able to take advantage of the afternoon high tide and tow it off the beach with the fuel and engines still on-board. The panga was towed to Santa Cruz Harbor and loaded on a truck for transport to the Homeland Security impound lot in San Diego.

## **Education & Outreach/Exhibits**

In fiscal years 2015, 2016, and 2017, we assisted with the development of Sanctuary exhibit conceptual design for the Randall Museum in San Francisco for their Ocean Hall focusing on sanctuaries; consulted on the Climate Change and Fishing Culture Exhibits at the Aquarium of the Bay in San Francisco which receive 800,000 visitors per year as well as consulted on the Whale exhibit at the California Academy of Sciences in San Francisco (1.5 million attendance) The San Francisco Zoo is redesigning their parking lot and putting in a new oceans exhibit hall, and the new ocean classroom will have educational programs. It opened for Oceans Day and we are putting in a semi-permanent exhibit. At California Academy of Sciences in San Francisco, we are working to update the major California Coast exhibit that shows the new sanctuary expansion boundaries. Elizabeth Babcock wants to collaborate on next summer's whale exhibit.

# **Education Programs**

Delivered 20 hour Oceans After School Programs to students in San Francisco; in fiscal year 2015 to 447 students; in fiscal year 2016 to 414 students, and in fiscal year 2017 to 359 students. Delivered At-Your-School Program to students in San Mateo, San Francisco, and Marin; in fiscal year 2015 to 4,086 students; in fiscal year 2016 to 3,995 students; in fiscal year 2017 to 3,488 students. Continuing LiMPETS: Long-term Monitoring Program & Experiential Training for Students monitoring sites in San Mateo, San Francisco, and Marin. Delivered Marine Explorers Camp in San Francisco; in fiscal year 2015 to 69 youth; in fiscal year 2016 to 73 youth, and in fiscal year 2017 to 144 youth. We have partnered with Exploratorium on their teacher workshops in San Francisco last year and this year. Delivered the WAVES program, a 50 hour marine science mentorship and education program for at-risk youth in San Francisco, in 2016 and 2017. Delivered Fishermen in the Classroom in San Mateo and San Francisco counties;

in fiscal year 2015 to 420 students; in fiscal year 2016 to 413 students; and in fiscal year 2017 to 899 students. Developed and delivered "Every Kid in a Park" program in partnership with Golden Gate National Recreation Area in San Francisco for the last two years. Partnered with Marine Science Institute in San Mateo in 2016 and 2017.

## **Public Programs**

In 2016 we hosted a Shark & Tuna Soirée for 200 people at the Jewish Community Center in San Francisco and Sea Otter Soirée for 195 people at the San Francisco Zoo. In 2017 we hosted Big Whales Soirée for 175 people at the Bay Model in Marin and Octopus Soirée for 200 at the San Francisco Zoo. Hosted World Ocean Day program for about 300 visitors at the San Francisco Zoo for last two years. Hosted Sharktoberfest, a festival celebrating sharks, in San Francisco with 750 attending. Hosted Family Programs at the sanctuary Visitor Center in San Francisco; in fiscal year 2016 for 735 people and in fiscal year 871 people attended. Co-sponsored the San Francisco International Ocean Film Festival; 4,250 people attended in fiscal year 2016 and 3,865 people attended in fiscal year 2017.

## **Special Programs**

Served on Ocean Views advisory board for Pescadero and La Honda school districts in San Mateo County; served on San Francisco Bay Area Climate Literary Impact Collaborative; served on KQED's Science Partnership Working Group.

A question was asked about what the soirees entail. Next will be in November. They are an enjoyable and entertaining night of learning. We bring in an expert on a certain subject area, host drinks, art displays and activities followed by a fun and engaging lecture. Learn about different species in sanctuary. Ticket prices are generally \$15-20 per person, a sophisticated evening for adults. Considering "extreme sea animals" for next theme. It is a combination of great speakers, art, science, and music. We can share information on the next event with MBNMS SAC.

# **Citizen Science**

Working with Cal Academy of Sciences on Rocky Shore Stewardship Partnership at Pillar Point Harbor; there is concern about excessive take of intertidal organisms. The program educates public on take regulations in tide pools, teaches responsible behavior, and helps guide people to responsibly watch wildlife in the rocky intertidal. Beach Watch monitoring from Año Nuevo to Manchester Beach in Mendocino County; includes MPA Watch within two state MPAs in the MBNMS; we partner with MPA Watch data on public use. Marine debris monitoring in northern management area; one Accumulation study plot at Ocean Beach and one Standing Stock plot at Año Nuevo.

# **Marine Protected Area Collaboratives**

We are on the San Mateo Collaborative and the Golden Gate Collaborative.

#### **Conservation Science**

ACCESS surveys off San Mateo county and recently within Santa Cruz and Monterey counties. Work with Sarah Allen on Central & Northern California Harbor Seal Census including Ano Nuevo, Pescadero, and Fitzgerald Marine Reserve. In 2016, *Nautilus* did an ROV exploratory cruise and mapping at the Farallon Escarpment; also went down to Pioneer Canyon and saw deep sea coral communities; was described as a "bamboo coral forest". Collaborated on multibeam and backscatter data with USGS modeling the substrate; added photos to our library and SIMoN (Sanctuary Integrated Monitoring Network).

## **Ship Strikes to Whales**

We have been working with the shipping industry on this issue; Michael Carver from Cordell Bank is the lead for three sites. We have requested a voluntary speed reduction (VSR) that vessels slow down to 12 knots in the shipping lanes down to 12 knots. Channel Islands National Marine Sanctuary and the Bay Area Air Quality Board is working with us to offer an incentive. Got an overwhelming response. The monetary incentive is \$250 if vessels slow down between Channel Islands to Bay Area ports and vessels must apply for the incentive. The incentive for slowing down in approach or leaving San Francisco vessel traffic areas is a \$1000 per transit. This incentive reduces air emissions as well as reduces lethal ship strikes to whales. We look forward to reporting back on success and if we see further reduction in speeds. In 2015 we had 17% cooperation in slow down; 2016, we had 29% cooperation; hoping for 50% cooperation this year. This is the percentage of transits and there are over 3,000 transits. Elizabeth suggested corporate sponsorship. Channel Islands has gotten additional funds and they are contributing the \$250. If there continues to be interest we will explore additional funding. The incentive is per trip traveling in the San Francisco shipping lanes, which includes the southbound lane off San Mateo County.

A question was asked if we have done calculations on the time difference of 12 knots versus higher speeds. Maria clarified yes, we look at time and cost. It does not add much time. Looking at how it affects cost, positively and negatively. Sarah Allen that the National Park System may want to collaborate with the sanctuaries on vessel speed reductions.

A member of Monterey Bay SAC shared information from the whale disturbance working group; they had a Moss Landing researcher on whale strikes; his theory was that the size of the ship and the distance between bow to engine can affect the strike. Whales hear the engines but the front of the ship is so far ahead that they don't recognize in time to move. Maybe there is a way ships could install sound generating device on bow of ship to help whales identify proximity of ship.

A question was asked if the incentive is one or both ways? The incentive is just one-way; it is based on individual transits.

Barbara asked if the monetary incentive is appealing to large ships. Maria noted that they find the positive publicity appealing. Combined with public relations it is a positive thing and helps people understand that this is an issue. For a lot of companies there is a long chain of command. When the SAC had the joint sanctuary workgroup five years ago, ship noise on natural behavior came up. Some of the researchers were concerned that making a lot of noise to scare the whales away would be improper impact on natural behavior, so the working group did not include that strategy.

# Seabird Protection Network

Presented to seven kayak clubs along the peninsula and presented to seven pilot associations and clubs throughout the region, including Unmanned Aircraft System (drone) hobbyists at the Hiller Aviation Museum in San Mateo; led efforts at the Golden Gate Marine Protected Area Collaborative to develop and distribute a waterproof brochure for boaters in the Bay Area including information about San Mateo County marine protected areas and special closures; Released a series of YouTube videos detailing the history of the program, with a strong emphasis on Devil's Slide Rock and partnerships with Half Moon Bay pilots and the California Highway Patrol; placed a sign at Half Moon Bay Airport, and a Kiosk at the San Carlos Airport aimed at flying high. Also working with the Half Moon Bay and San Carlos airports and local pilot community to educate about sensitive wildlife at Devil's Slide Rock; working with the local pilot community and regional airport managers, sent direct pilot mailings pre-airshow and then hosted an outreach booth at the Airshow to reach new pilots at the Pacific Coast Dream Machine Airshow; collaborating with the California Department of Boating and Waterways to implement an On-Board Fishing Line Recycling Program in which several passenger fishing vessels in Half Moon Bay are participating; working with staff from Natural Bridges State Park to install a wayside sign discouraging seabird disturbance.

#### **Emergency Response**

Responded to the discharge of 12 containers in the southern shipping lane and conducted surveys to locate containers within MBNMS; materials have washed up in Drakes Bay and Pacifica, but no containers in Monterey Bay; responded to six vessel groundings along the San Mateo coast, including two panga boat groundings; damage assessment planning with the Joint Assessment Team, trained and tested rapid damage assessment forms for sandy beach and rocky intertidal habitats, contributed to new manual on Best Management Practices to assess damages to marine mammals, which is a national report through National Marine Fisheries Service and National Ocean Service Office of Response and Restoration and Office of National Marine Sanctuaries; assessing the location and impacts of a sunken dry dock (over 500 feet in length), which occurred in October 2016 in Pioneer Canyon.

A question was asked if there were toxic materials in the containers? Matson shipping company said the containers were empty; however, bread bags washed up on Drakes Beach.

#### **Permits and Resource Protection**

Issued Maverick's Surf Contest authorizations in 2016 and 2017, and coordinated with enforcement and safety agencies to plan for the event. Permits issued include: White shark research permit, LiMPETS permit for two intertidal monitoring sites in the northern management area, research permit for development and deployment of a smart crab trap outside fishing window; research permits in 2016 and 2017 to deploy moorings for upwelling study outside Golden Gate; research permit for surface wave motion moorings off of Half Moon Bay (HMB); research permit to sediment collection at Pillar Point for DNA analysis; research permit for discharging XBTs to study deep-sea canyons in northern MBNMS; research permit for a mooring an ADCP and deploying of an unmanned sailing vessel off HMB.

Other highlights include serving as a member of Santa Cruz Littoral Cell Workgroup (which includes southern San Mateo County) in an advisory capacity; guiding the alternatives analysis for the North Half Moon Bay Shoreline Improvement Project (A.K.A. Surfers Beach); attending the Area Contingency Planning Meetings for USCG District 10, which includes the waters off

San Mateo County; staffed an Overflight Working Group that included reviewing the Devil's Slide Rock area of San Mateo County; attended meetings and provided technical expertise to the MBNMS Advisory Council Motorized Personal Watercraft subcommittee.

## **Climate Change**

We have had publications on climate change that affect the northern management area including "Climate Change Indicators: A Monitoring Inventory and Plan for Tracking Climate Change in the North-central California Coast and Ocean Region". Highlights also include hosted Climate Change and Focal Resources for North-central California Coast and Ocean Region workshop and Climate Change Vulnerabilities for the North-central California Coast and Ocean Region workshop and using ACCESS CTD data as proxy for pH throughout water column.

# Maritime Heritage

Highlights include *Nautilus* expedition to explore the USS *Independence*; collected fine scale mapping data and stereo-image data of hull of ship (approximately 36 hours of video). Telepresence and lecture series outreach as well as 2,450 news stories with more than 115 million media impressions. Discovered two new sponge species on the *Independence*. Hosted a group from UC Berkeley Lawrence Livermore Labs to look at radioactivity on vessel to see if it posed any threats; tested as normal background levels. GFNMS would like to conduct a follow-up survey to take samples of hull.

## MBNMS Superintendent's Report: Paul Michel, MBNMS Superintendent

MBNMS is working on a US Forest Service partnership focusing on California sanctuaries and national forests to highlight shared mission and watershed connection and values they provide. Shared learning opportunities to identify partnerships; Paul went to visit Stanislaus National Forest. Introduced Jeff Marsolais, Acting Deputy Regional Forester/Forest Supervisor at Tahoe Basin National Forest. Jeff shared that they have much of the same as we do in terms of close connections with communities, responsibility to manage resources for present and future generations. It has been a privilege to have this partnership unfold. Looking at ways to share resources differently and how we share in the responsibility of managing America's resources. Tahoe has a federal advisory committee where he works with stakeholders as a federal official.

The ACCESS cruise expanded to Monterey, would like to continue and seeking funding. Used settlement funds with NMFS to characterize Essential Fish Habitat areas and Voluntary Management areas. Still working through Pacific Fishery Management Council (PFMC) process. Goal to get baseline conditions using AUV and crew, still going through images from cruise and georeferencing for mapping.

Looking at how pervasive microplastics are. Conducting microplastics cruise with Moss Landing Marine Lab, taking samples off Santa Cruz Beach boardwalk and marine outfall. Through laundry and discharge of effluent water, finding that water has microplastics and fleece remnants; seeing steady stream coming out of sewage outfalls. Went out with Monterey Bay Aquarium Research Institute (MBARI) at Davidson Seamount taking samples way offshore. Seeing a lot of variation in day versus night, and with current shifts. Going through data to analyze samples.

Also working with MBARI on deep-sea coral planting; it is expensive and difficult. If it is successful, it could mean big things for areas that have been impacted. Have been transplanting corals on Sur Ridge, has been successful across five species of deep sea coral. Looking at old growth coral (500-1000 years old), how they grow, how to recover, going back to Sur Ridge in October to do ocean acidification work using benthic respirometers.

# **Desalination Update**

On track to finish in fall; final EIS released in March with many public comments; proposed special use permit for desal pipeline in sanctuary. Working with Caltrans and Coastal Commission on Mud Creek mudslide to get road open and deal with debris. Authorized permit to construct replacement road over the slide. Will require debris manipulation. Authorizing rock/sediment retention to protect black abalone. Will require 5 year monitoring and onsite monitoring.

# 25<sup>th</sup> Anniversary Events

- a. Aug 26<sup>th</sup> Coastal Discover Fair in San Simeon
- b. Sept 9th Appreciation Event at SEC in Santa Cruz
- c. Sept 16<sup>th</sup> 25<sup>th</sup> Anniversary Gala
- d. Sept 26<sup>th</sup> Monterey Sportsfest Sanctuary Celebration Event (Family Movie Night)
- e. Oct 14<sup>th</sup> Lecture series part 3 Scott Benson @ SEC
- f. Oct 19<sup>th</sup> Offshore Habitats Lecture at the Pacific Grove Museum of NH
- g. Nov 15<sup>th</sup> Seamounts Lecture at PG SEC
- h. Nov 16th Seamounts Lecture at PG MNH

*P.J. suggested considering not offering fleece products in our shops or visitor centers. Share information on fleece and microplastics if available.* 

A member asked about who has responsibility it is to deal with whales on beaches. It depends on where it comes ashore. Have tried to work out with NMFS to tow to Big Sur for condors to feed on it but the whale fell apart on way down. The one in pebble beach was towed out and sunk offshore; will be studying whale falls. If EPA gets involved, requires a permit to dispose of a whale in the sanctuary. Worked out procedure for distance offshore to stay in California current.

Another member noted that the whale appeared to not be entangled. Moss Landing Marine Lab has had a hard time doing necropsy; were able to get some samples but not everything. The whale did have large chunks out of it; don't know if it was post-mortem.

Another member asked about active permits. Paul clarified that some of them are questions from people asking if they need a permit.

# <u>Update on Actions Pertaining to MBNMS Northern Management Area: Paul Michel,</u> <u>MBNMS Superintendent</u>

GFNMS Council Recommendations: Continue to prioritize the training of public safety personnel with Motorized Personal Water Craft; Present MBNMS AC subcommittee findings to the GFNMS AC and have a discussion about public usage.

MPWC Subcommittee Recommendations: Change MBNMS regulations to allow MPWC use at Mavericks during High Surf Advisory conditions (from High Surf Warning); Continue dialog and planning required for volunteer groups.

GFNMS Council Recommendation: Maintain the existing permitting process regarding seabirds and the continued discharge regulations related to chumming for seabirds. MBNMS Seabird Protection Actions: Research permit process remains in place; Continue outreach and dialog with operators on permitting requirements

Accepted GFNMS AC Overflight Working Group Recommendations: Request the FAA to change chart markings to make pilots aware of Devil's Slide Rock and risks to resources; Immediately engage with FAA's current process to reconsider Class B Airspace to better support this need; Gather data on whether this approach worked.

GFNMS Council Recommendation: Greater Farallones NMS proceed with an open, transparent National Environmental Protection Act (NEPA) process to address San Francisco Pacifica Exclusion Area (closure of the Donut Hole).

MBNMS Action: Three scoping comments received in favor of expansion to include Pacifica Exclusion Area: MBNMS Council ranked expansion low priority; Agency consultations (both external and internal) resulted in decision to leave Exclusion Area in place.

GFNMS Council Recommendation: Monterey Bay National Marine Sanctuary articulate a definition of beneficial reuse of clean dredged materials from harbors or other appropriate materials from other sources at the San Mateo County Surfer's Beach site. MBNMS/GFNMS Action: MBNMS and GFNMS staff worked with harbor on beach nourishment options immediately available to Surfer's Beach; Surfer's Beach Pilot Project development; Beach nourishment white paper (GFNMS); Analysis of beach nourishment options

Kellyx noted that the San Mateo County Resource Conservation District has been working with harbor district on water quality issues; completed circulation study; would like to share data with Monterey Bay staff. MBNMS SAC Harbor District representative has noticed that much of dredging activity is characterized as waste. In the last 30 years, clean material is now a resource that can be reused, and is desired by property owners. Kellyx asked what makes this a different site, to which Paul answered the jurisdiction of harbor versus sanctuary. Maria clarified that the designation document says dredged material (taken from the water). There is a prohibition against excavating underwater. Ed Smith from AMBAG noted that AMBAG is waiting for results that are important to their jurisdictions.

Pushing for draft of management plan, hoping to finish by this year; public draft by early 2018. Dan Haifley noted that the MBNMS SAC felt strongly about correcting the exclusion zone over time in the future and thanked staff for noting as an issue.

#### Office of Law Enforcement Update: Dayna Matthews

## **Presentation available here**

Transitioning workforce to enforcement officers and special agents. Two years ago was able to put plan in place for hiring, started with Brian Christy. Lots of focus on enforcement officer positions, more than doubling the agents. We have added many positions: 5 in California. Probably next spring before we can hire 10-12 more. We are still in position to hire veterans either in the military or just out. Next week there is a hiring fair in Virginia in effort to hire there. There was a hiring freeze, but it was lifted this spring after 8 years for special agents. There is a 57 year old retirement requirement. We had massive losses with no new hires. We have advertised for the first time in 10 years and will be hiring 8 special agents. One on the East coast, Alaska, Samoa, and 4 in California (Alameda, Long Beach, Monterey, Santa Rosa).

A question was asked why Sacramento has two field officers versus the coastal locations. It has to do with Endangered Species Act (ESA) listed salmon and the Delta, and habitat degradation, as Delta issues with ESA are very significant. Brian Christy added that a third party study that went to sanctuaries is how they selected locations for officers and agents.

A member of Monterey Bay SAC noted that in the MBNMS management plan they recommended to monitor whale watch operators with secret shoppers to evaluate compliance levels.

Another priority is IUU: Illegal Unreported Unregulated Fisheries. Officers stationed in airport areas such as Long Beach, Seattle, Portland, as ports of entry.

To find out about violations, penalties, policies, visit NOAA GCEL: <u>www.gc.noaa.gov/enf</u>. Enforcement hotline phone number: 1-800-853-1964.

# LUNCH

# Public Comment: Items Not On Agenda

Bart Selby: Comment on pelicans and harbor disruption. Noted that harbors are now filled with wildlife. We need to protect wildlife in harbors, not just sanctuaries. Boats are going faster than 10-15 knots and wildlife are vulnerable. Pelicans are hooked and are cut on fishing gear. This area is one of the most important pelican roosts. Have to worry about predators, difficult to land on rocks. Do not want to flush pelicans as it may cause damage.

Judy from Pelican Media shared the "Pelican Dreams" film.

Rebecca Duerr/International Bird Rescue, two wildlife clinics serving San Francisco and Los Angeles. Primary care provider for birds in sanctuaries. Treated 5,000 pelicans in fishing line interactions. Large number from Monterey Bay and Santa Cruz; wharf beach and waterfront are an issue. Lots of damage and injuries to body of pelicans, and they are expensive animals to treat.

Leora Feeney/Golden Gate Audubon Society. Conducted 400 surveys of breakwater in Alameda; crucial to Alameda's wildlife. Seen lots of flush and lots of danger; working with Fish and

Wildlife, funded and placed signs on the breakwater and disturbances were reduced. Only took 1 citation and no further ones. Many disturbances are unintentional. In Alameda, fishermen have containers to recycle their lines. Dock in Alameda was removed. Project to place a seal float.

Mary Lorenas – Thanks to Fish and Wildlife for their enforcement of illegal fishing boats.

# Beach Nourishment Workshop: Presentation on Beach Nourishment Options, case study at Surfer's Beach

Presentation Available Here

Doug George and Max Delaney of GFNMS and Brad Damitz of San Mateo County Harbor District gave a presentation on sediment in sanctuary beaches and the potential for beneficial reuse and beach nourishment. Doug reviewed sediment processes and how they affect us locally. He discussed beneficial reuse and beach nourishment (BRBN) as well as the federal and state requirements to use sediment for beach nourishment.

Brad Damitz introduced the Surfer's Beach Sand Replenishment Pilot Project. In 2009, US Army Corps of Engineers (USACE) completed an appraisal of Pillar Point Harbor showing erosion had increased since the construction of the East Breakwater in 1961. USACE determined there is no federal interest (funding) to pursue a beach nourishment project. The Board of Harbor Commissioners then voted to pursue a project without USACE and started looking for funding. A funding request was submitted to Ocean Protection Council for \$75,000 and a grant agreement was signed June 2017. The pilot project will involve a one-time placement of approximately 75,000 cubic yards of sand. The benefits and impacts will then be studied including biological and physical monitoring. The overall goal is to address the accelerated coastal erosion rates as a result of the construction of the East Breakwater.

Max Delaney reviewed the regulatory setting for conducting beach nourishment from beneficial reuse. USACE and US Environmental Protection Agency (EPA) usually take the lead on these projects but many federal and state agencies are involved in approving BRBN. He reviewed MBNMS regulations that may apply to BRBN projects. MBNMS regulations prohibit permitting or approving of disposal of dredged materials except at disposal sites already authorized by EPA prior to designation of the sanctuary. However, there is no definition of disposal. MBNMS regulations can allow placement of clean non-dredged materials below Mean High Water (MHW) by issued permit. Placing cleaned dredged material above MHW doesn't require a permit. The regulations cannot allow disposing of clean dredged material below MHW.

# Advisory Council Member Discussion

There was conversation regarding current dredging in Pillar Point Harbor and the forensic analysis of the material inside the breakwater. It was asked how long this pilot project will be monitored. This pilot project is a short-term solution, because the more permanent solution of moving the highway will take more than ten years to complete. This project gives CalTrans time to address the long-term solution. It was also asked why there is no definition of dredged material. The overlaying complication is the sanctuary boundary line. Dredged material is defined in the Clean Water Act. It was expressed the public should be able to have input on this project. Opportunities for community members to learn more about this pilot project could go a long way in their support. The grant includes several public workshops to present information on the plan for this project.

Overall, both Advisory Councils agree (sense of the body) this is a good plan and support them proceeding. There was concern of doing a show of hands because the Advisory Councils don't know what they don't know without seeing the white paper.

## MBNMS SAC Business: Approve June Meeting Minutes/Emergency Meeting Minutes

Approval of June, 2017 DRAFT Meeting Minutes. MOTION: Dan Haifley, Gary Pezzi seconded. (Vote: 10 in favor, 0 opposed, 2 abstentions)

Approval of July 10, 2017 DRAFT Emergency Meeting Minutes. MOTION: Steve Scheiblauer, Brian Nelson seconded. (Vote: 10 in favor, 0 opposed, 2 abstentions)

Approval of July 19, 2017 DRAFT Emergency Meeting Minutes. MOTION: Rich Hughett, Dan Haifley seconded. (Vote: 7 in favor, 0 opposed, 5 abstentions)

WORKING GROUP UPDATES Conservation Working Group (CWG): no new announcements

Research Activity Panel (RAP): no new announcements

Sanctuary Tourism and Recreation Working Group (STAR): Get Into Your Sanctuary promo newsletter was sent out. Recreation and Tourism newsletter also sent out. There are 604 active emails receiving the newsletter.

World Heritage Site Sub-Committee: no new announcements

#### MEMBER REPORTS

Dan Haifley, At-Large primary: 830,000 petitions signers, online comments, and resolutions were identified by the National Marine Sanctuary Foundation as having been logged in response to the President's Executive Order to review new and expansions of existing national marine sanctuaries and marine national monuments since 2007.

O'Neill Sea Odyssey will serve its 100,000th students in 2018 and just launched its national Next Generation Science Standards (NGSS) curriculum distribution program in partnership with the Pepper College Readiness Network.More. For more info, visit: oso100k.org.

Paul Reilly, CDFW primary: Early July saw increased recreational salmon fishing effort in Monterey Bay, culminating in one of the most productive days of the season out of Santa Cruz on July 15; unfortunately that was the last day of the 2017 sport season south of Pigeon Point.

Fishing for California halibut was comparable to the previous 2 years, although success was better in northern Monterey Bay and anglers were releasing relatively more sub-legal sized fish, a good sign of recruitment.

Due to the extension this year of the maximum allowing fishing depth to 50 fathoms, anglers were landing more bocaccio as well as the allowable limit of one canary rockfish per person; these are both fully recovered rockfish species.

The majority of landings of coastal pelagic species into Half Moon Bay, Moss Landing, and Monterey have been squid with about a half dozen boats or less operating from each port. Anchovies have been observed north of Monterey.

The Department has been involved in a 2-year process to amend its Master Plan for the development of Fishery Management Plans, under the Marine Life Management Act of 1998. There have been 13-information gathering projects for consideration as to how we prioritize our state-managed fisheries for management attention. A draft report is scheduled for completion in October, and we expect to start the process of presenting our recommendations to the Fish and Game Commission in February 2018.

Katherine O'Dea (via PJ Webb), Conservation primary: Save Our Shores with Surfrider and support of thousands of local citizen activists brought sufficient pressure to cause CEMEX to agree to a settlement with the CA Coastal Commission, avoiding litigation with the CCC, State Lands Commission and the City of Marina.

Steve Scheiblauer, Harbors primary: Lisa Ekers retired as Santa Cruz Harbor Port Director. Marian Olin has been named new director.

Ed Smith, AMBAG primary: Encouraged to hear collaboration from so many agencies on beach nourishment in GFNMS and MBNMS. This is a hugely important activity.

Tucker Hirsch, Education primary: no new announcements

Rich Hughett, Recreational Fishing primary: Back from Loreto Bay National Marine Park. It was exciting to see. Do we have a sister sanctuary? It would also be nice to have a list of all the sanctuaries around the world. He also asked if the Advisory Council could receive a shortened presentation of the relationship between kelp, urchins and sea otters.

Paul Michel responded there is a sister sanctuary to MBNMS. It is Isole Egadi Marine Protected Area in Sicily, Italy. The MPA Center can provide a list of all sanctuaries around the world.

PJ Webb, At-Large primary: There is still lots of tourism even with the Big Sur Highway 1 closure. Some places have seen less tourists but most are ok. There is a terrible domoic acid bloom in the area. The water off Pismo is smelly, with dead fish. The Ocean Fair at Coastal Discovery Center will be on August 26th.

Brian Nelson, Diving primary: The Dive Newsletter was completed and sent to 2,689 active email addresses. He attended and presented at a Monterey Bay Sea Otters meeting on July 26, 2017.

Mike Bekker, Tourism primary: The MBNMS Gala is happening on September 16th at Monterey Bay Aquarium. Sponsorship for the event is good but could be better. He was invited to Middlebury Institute of International Studies to talk to student on ocean policy representing the sanctuary and business.

Gary Hoffmann, At-Large primary: Visited Pebble Beach golf course and observed golfers intentionally hit balls into the ocean/sanctuary. The caddy was applauding their activity. Gary is concerned if Pebble Beach Company is considering this a serious issue. During the weekend of July 4th, a few teenage girls were observed climbing Hopkins fence to get a closer look at harbor seals on the beach. This incident highlights how crucial BayNet is for interpreting. This program needs additional funding. Through the end of August U.S. National Park Service is offering lifetime passes to people aged 62 and older for \$10.

Gary had questions for Paul Michel: 1) Has there been follow up with whale watch operators on their commitment to put together whale watching protocol and self-regulating their activities? 2) With observing continual golf balls in ocean, has there been follow up with Pebble Beach Company on them taking action to deal with the issue?

Paul said he will check with Karen Grimmer, Resource Protection Coordinator on the whale watching operations. In regards to the Pebble Beach Company, the plan was for them to outreach with employees, conduct regular cleanups and help fund the Fulmar to do routine surveys. Also, Monterey Bay Aquarium has a collection permit and agreed to do golf ball pickups. MBNMS staff is also doing scuba surveys. The kids and their parents picked up most of the balls that have been removed from the sanctuary, an estimate 20,000 balls. About half the survey work that we need to do has been done. Have to wait until the fall to do more survey work. There will be for discussion with Pebble Beach Company for long term work and help with surveys.

Maria de la Paz Carpio-Obeso, CA EPA primary: Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Once-Through Cooling Policy) Implementation Activities: The State Water Resources Control Board (State Water Board) Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Policy) requires owners or operators of existing power plants to implement measures to mitigate interim impingement and entrainment impacts resulting from their cooling water intake structures. The interim mitigation period commenced on October 1, 2015, and continues up to and until owners or operators achieve final compliance with the Policy. Section 2.C(3) of the Policy provides options for demonstrating compliance with the interim mitigation requirements. Option 2.C(3)(b) demonstrates compliance with interim mitigation by providing funding to the California Coastal Conservancy which will work with the Ocean Protection Council to find an appropriate mitigation project. Staff reviewed the information provided by the power plants owners and operators to calculate the first annual interim mitigation payments. Draft determinations for power plants that used the default determination for the payments were released for public comments on August 8, 2017.

The Once-Through Cooling Policy requires the Statewide Advisory Committee on Cooling Water Intakes Structures (SACCWIS) to advise the State Water Board on whether the Policy's compliance schedule takes into account the reliability of California's electricity supply. California Independent System Operator (CAISO) conducted a 2018 reliability study for Encina Power Station. As a conclusion of this study, SACCWIS recommended to the State Water Board to extend the compliance date of Encina Power Station to ensure grid reliability in the San Diego area. The State Water Board proposed to amend the Policy to extend the compliance date for Encina Units 2 to 5, from December 31, 2017, to December 31, 2018. The State Water Board adopted the proposed amendment on August 15, 2017.

Bacteria Provisions and a Water Quality Standards Variance Policy and Amendment to the Water Quality Control Plan for Ocean Waters of California: The State Water Board is proposing a statewide control program to protect recreational users from the effects of pathogens in California water bodies. The program would be adopted as amendments to both: the Inland Surface Water, Enclosed Bays and Estuaries Plan and the California Ocean Plan. Significant proposed program elements may include: new water quality objectives for both fresh and marine waters based on newly released United States Environmental Protection Agency (U.S. EPA) criteria; a reference beach/natural source exclusion process and high flow exemptions; and revised beach notification requirements. Staff released the Staff Report for public comments on June 30, 2017. Written comments must be received no later than 12:00 PM noon on August 16, 2017.

Clifton Herrmann, College primary: no new announcements

Gary Pezzi, Recreation primary: Hats off to Dan Haifley for coordinating the paddle out memorial for Jack O'Neil.

Cynthia Mathews, At-Large alternate: The MBNMS 25th anniversary event is coming up in Santa Cruz on September 9th. A Polynesian festival will be at Santa Cruz Wharf during the final weekend of august. Many more events are coming down the pipeline but need more details before reporting out.

Meeting adjourned at 4:30 PM